



Latitude:34.49113, Longitude:-93.27585

Route:227 Section:00 Log:6.06

Arnold Road ID:26x227x0xA, Arnold Log mile:6.05

District 06, 51 - Garland County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

Bridge Posting Information

41 - Structure Open/Posted/Closed: A - Open, no restriction

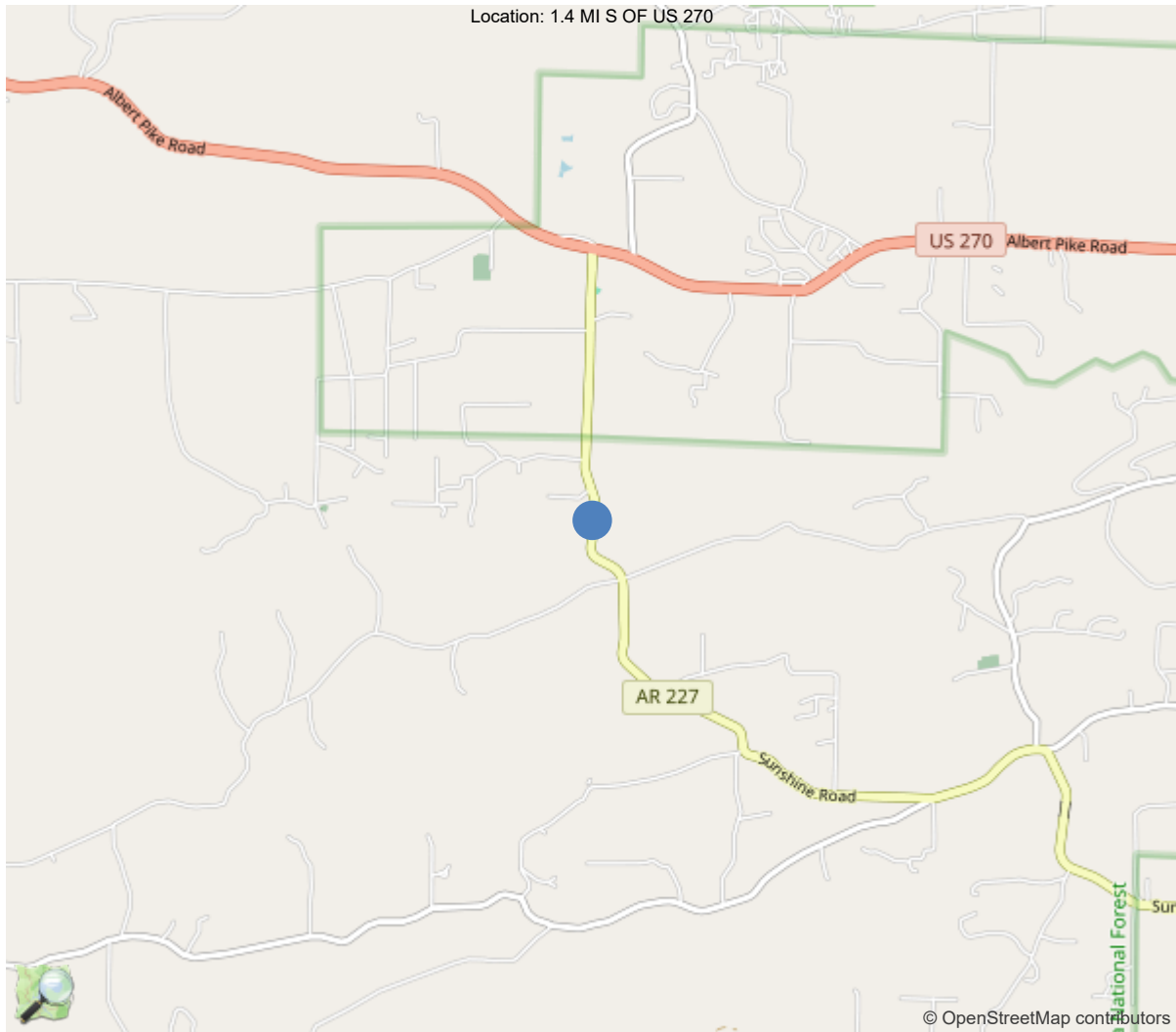
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	33		
Code 9 (31 Tons)	37		
Code 5 (40 Tons)	58		

If calculated Capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner



30"x36" AR



34.49113, -93.27585



Asset #M2414(Routine, Underwater type 2)

SH 227 Log 6.06 over HALLMAN CREEK

Location: 1.4 MI S OF US 270

Team Lead: Chris Doggett Inspection Date: 08/16/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M2414
(5) Inventory Route	1
(2) Highway Agency District	06 - District 06
(3) County Code	51 - Garland County
(4) Place Code	0
(6) Features Intersected	HALLMAN CREEK
(7) Facility Carried	SH 227 Log 6.06
(9) Location	1.4 MI S OF US 270
(11) Mile Point	6.06 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	34.49113
(17) Longitude	-93.27585
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	21
Material	2 - Concrete continuous
Type	1 - Slab
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	2
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1950
(106) Year Reconstructed	0
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	1821
(30) Year of ADT	2018
(109) Truck ADT	6 %
(19) Bypass, Detour Length	10 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	15 ft
(49) Structure Length	32 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	20.7 ft
(52) Deck Width Out to Out	22.2 ft
(32) Approach Roadway Width (W/Shoulders)	22 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	21.7 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	1 - Navigation protection not
(39) Navigation Vertical Clearance	0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	0
(26) Functional Class	7 - Rural Major Collector
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exists
(102) Direction of Traffic	2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	2 - Bridge is eligible for the
CONDITION	
(58) Deck	6
(59) Superstructure	6
(60) Substructure	6
(61) Channel & Channel Protection	5
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2 - M 13.5 / H 15
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	43
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	26
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	5 - Bridge foundations determined to
PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	55 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 117
(96) Total Project Cost	\$ 234
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	2103
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	08/16/2023		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			



Asset #M2414(Routine, Underwater type 2)

SH 227 Log 6.06 over HALLMAN CREEK

Location: 1.4 MI S OF US 270

Team Lead: Chris Doggett **Inspection Date:** 08/16/2023

General Observation

approach going north
Soundings taken 08/16/2023

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)
Deck with an asphalt overlay

61 - Channel/Channel Protection (5 - Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and brush restrict the channel.)
Soundings taken
The left embankment upstream is beginning to erode.



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Location: 1.4 MI S OF US 270

Team Lead: Chris Doggett Inspection Date: 08/16/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	710	534	145	31	0
1080	Delamination/Spall/Patched Area	SF	35	0	35	0	0
1090	Exposed Rebar	SF	1	0	0	1	0
1120	Efflorescence/Rust Staining	SF	60	0	60	0	0
1130	Cracking (RC and Other)	SF	80	0	50	30	0
510	Wearing Surfaces	SF	678	648	30	0	0
3220	Crack (Wearing Surface)	SF	30	0	30	0	0
(38) One exposed rebar in span 1. Edges of the slab are deteriorating & have spalls. Scattered cracks on the soffit in both spans. With 1 large crack in the center the whole length							
213	Masonry Pier Wall	LF	19	0	19	0	0
1610	Mortar Breakdown (Masonry)	LF	19	0	19	0	0
(213) Footing is exposed down to solid rock formation.							
217	Masonry Abutment	LF	88	50	36	2	0
1610	Mortar Breakdown (Masonry)	LF	30	0	30	0	0
1620	Split/Spall (Masonry)	LF	8	0	6	2	0
(217) Spall on each corner. Footing is exposed down to solid rock formation.							
220	Reinforced Concrete Pile Cap/Footing	LF	107	0	107	0	0
6000	Scour	LF	107	0	107	0	0
(220) All three bents the footings are exposed.							
330	Metal Bridge Railing	LF	64	64	0	0	0
515	Steel Protective Coating	SF	128	128	0	0	0



Elevation



Channel looking down stream



Bent 1: left side at the slab is missing some stone



Span 1: soffit with a large longitudinal crack down the centerline.



Span 1 at bent 2: couple small spalls in the slab.



Channel looking upstream. The left embankment is beginning to erode.



Deck view



Inventory looking north



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Location: 1.4 MI S OF US 270

Team Lead: Chris Doggett Inspection Date: 08/16/2023

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	Yes
A-56 - Joint Cleaning/Flushing Needed	No
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	No
A-59 - Joint Repair Needed	No
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	No
A-63 - Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	No

A-54 - Sealable Deck Cracks (No)

A-55 - Deck Washing Needed (Yes)

A-56 - Joint Cleaning/Flushing Needed (No)



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Location: 1.4 MI S OF US 270

Team Lead: Chris Doggett Inspection Date: 08/16/2023

A-57 - Girder End and Bearing Painting Needed (No)

A-58 - Cap Cleaning/Flushing Needed (No)

A-59 - Joint Repair Needed (No)

A-60 - Full Girder Painting Needed (No)

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (No)

A-63 - Missing/Incorrect Log Mile Signage (No)

A-64 - Vegetation Removal Requested (No)



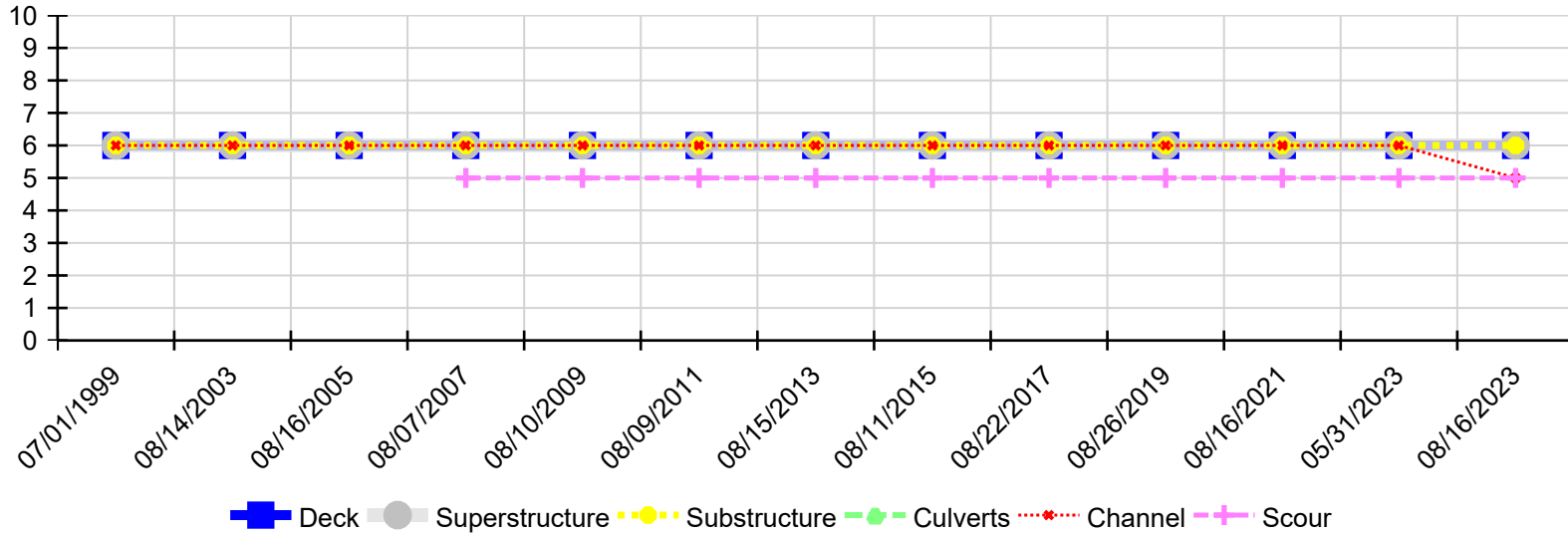
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Location: 1.4 MI S OF US 270

Team Lead: Chris Doggett Inspection Date: 08/16/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
08/16/2023	6	6	6	N	5	5
05/31/2023	6	6	6	N	6	5
08/16/2021	6	6	6	N	6	5
08/26/2019	6	6	6	N	6	5
08/22/2017	6	6	6	N	6	5
08/11/2015	6	6	6	N	6	5
08/15/2013	6	6	6	N	6	5
08/09/2011	6	6	6	N	6	5
08/10/2009	6	6	6	N	6	5
08/07/2007	6	6	6	N	6	5
08/16/2005	6	6	6	N	6	N
08/14/2003	6	6	6	N	6	N
07/01/1999	6	6	6	N	6	N